Safety Data Sheet
29 CFR 1910.1200

Printing date 05/28/2015 V 406 Reviewed on 05/28/2015

*
1 Identification

· **SDS version (country)** 406US1
· **Product identifier**

· **Trade name: GENOCURE* LBP**
· **Synonym / Description:** Liquid photoinitiator blend
· **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the mixture**
Photoinitiator for UV-curable inks, coatings, adhesives, fillers, etc

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
RAHN USA Corp.
1005 North Commons Drive
Aurora, IL 60504
USA
Tel: +1 630 851 42 20
Fax: +1 630 851 48 63
www.rahn-group.com
rahn@rahn-group.com

· **Information department:** Regulatory Affairs
· **Contact person:** Brigitte Lindner

· **Emergency telephone number:** ++1 800 535 5053 (Infotrak, 24h)

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2 Hazard(s) identification

· **Classification of the substance or mixture**

GHS08 Health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
· **Additional information:**
Information on acute toxicity of ingredients:
Please refer to section 11 for data on acute toxicity; in case no data are given for a specific substance being present >1%, the acute toxicity of this substance is unknown.

· **Label elements**
· **GHS label elements** The product is classified and labeled according 29CFR 1910.1200
· **Hazard pictograms**

GHS08

· **Signal word** Warning
· **Hazard statements**
May cause damage to organs through prolonged or repeated exposure.
Harmful to aquatic life with long lasting effects.
· **Precautionary statements**
Do not breathe dust/fume/gas/mist/vapors/spray.
Avoid release to the environment.
Get medical advice/attention if you feel unwell.

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Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Other Hazards** Hazards Not Otherwise Classified (HNOC): No
· **Additional information:**
Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation and the (M)SDS contains all information required by the Controlled Products Regulation.
· **Hazard description:**
· **WHMIS-symbols:**
D2A - Very toxic material causing other toxic effects

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 1
Reactivity = 1

· **HMIS-ratings (scale 0 - 4)**

Health = *1
Fire = 1
Reactivity = 1

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3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

119-61-9	benzophenone	STOT RE 2, H373; Aquatic Chronic 3, H412	25-50%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Involve doctor immediately.
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
Avoid contact with UV- and sunlight.
· **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:**
Call a doctor immediately.
Rinse out mouth and then drink plenty of water.

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· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire fighting measures that suit the environment.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
COx
· **Advice for firefighters**
· **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Keep people at a distance and stay upwind.
· **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect from heat.

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· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
Store receptacle in a well ventilated area.
Store under lock and key or with access restricted to technical experts or their assistants only.
Do not store at temperatures above 40 °C.
· **Information about crystallization**
Product may crystallize. If needed heat at maximum 60 °C and stir.
· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**	
119-61-9 benzophenone (25-50%)	
WEEL	Long-term value: 0.5 mg/m³

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
· **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
· **Protection of hands:**

Protective gloves

· **Material of gloves**
Products without solvents added: wear nitrile gloves. Replace gloves immediately when torn or any change in appearance (dimesion, colour, flexibility etc) is noticed.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**

Tightly sealed goggles

Goggles recommended during refilling.

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· **Body protection:** Impervious protective clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Color:	According to product specification
· **Odor:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· **Flash point:**	> 100 °C (> 212 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	
Decomposition temperature:	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Not determined.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapor pressure:**	Not determined.
· **Density at 20 °C (68 °F):**	1.07 g/cm³ (8.929 lbs/gal)
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
Water:	<0.2 g/l
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic (77°F) at 20 °C (68 °F):	90 mPas
Kinematic:	Not determined.
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity**
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
Do not store at temperatures above 40 °C.
No decomposition if used and stored according to specifications.

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· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:**
Incompatible with acids and bases.
Avoid moisture.
· **Hazardous decomposition products:** No dangerous decomposition products known.

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11 Toxicological information

· **Information on toxicological effects**
Available data are listed below; for endpoints not adressed in section 11, no data are available.
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**		
119-61-9 benzophenone		
Oral	LD50	2895 mg/kg (mouse)
Dermal	LD50	>3535 mg/kg (rabbit)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.

· **Sensitization:**		
119-61-9 benzophenone		
Dermal	OECD 406 Sensitisation	neg Neg/pos (guinea pigs)

· **Subacute to chronic toxicity:**		
119-61-9 benzophenone		
Oral	(90d)	20 mg/kg b.w. (rat) (NOAEL) (LOAEL 28d) = 100mg/kg b.w. (rat)

· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
119-61-9	benzophenone	2B

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

· **Mutagenicity studies**	
119-61-9 benzophenone	
OECD 471 AMES	negative Neg/Pos (bacteria) literature

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12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**	
119-61-9 benzophenone	
EC50/72h	3.5 mg/l (algae)
LC50/96h	15 mg/l (fish)
NOEC (dynamic)	5.86 mg/l (fish) (Pimephales promelas)
OECD 202 Daphnia acute immobilization	6.7 mg/l (EC50/48h) (daphnia)
OECD 203 fish acute toxicity (dynamic)	15.3 mg/l (fish) (Pimephales promelas) Flow-through test
ready biodegradability	84% (bacteria) (OECD 301F)

· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Remark:** Harmful to fish
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Do not allow product to reach sewage system.
Can be incinerated, when in compliance with local regulations.

· **Uncleaned packagings:**
· **Recommendation:**
Disposal must be made according to official regulations.
Packaging can be reused or recycled after cleaning.

14 Transport information

· **UN-Number**
· **DOT** Void

· **UN proper shipping name**
· **DOT** Void

· **Transport hazard class(es)**

· **DOT**
· **Class** Void

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· **Packing group**
· **DOT** Void

· **Environmental hazards:**
· **Marine pollutant:** No

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15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**

· **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**
All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

119-61-9	benzophenone

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**
None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**
All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)** None of the ingredients is listed.
· **Canadian Ingredient Disclosure list (limit 1%)** None of the ingredients is listed.

16 Other information

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The data are based on the current state of our knowledge, and are intended to describe the product with regard to the requirements of safety. The data should not be taken to imply any guarantee of a particular or general specification. It is the responsibilty of the user of the product to ensure to his satisfaction that the product is suitable for the intended purpose and method to use. We do not accept responsibility for any harm caused by the use of this information. Furthermore nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use. In all cases, our general conditions of sale apply.

· **Relevant phrases**
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

· **Abbreviations and acronyms:**
ICAO: International Civil Aviation Organisation
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
DOT: US Department of Transportation
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

· ***Data compared to the previous version altered.**